

Work Order ID 136105

Friday, August 28, 2015 1:47:05 PM

646.9603
B136105
RTV N/C

136105

Page 1

Item ID: 646.9603

Revision ID:

Item Name: Lower Cutter Assy Low

Start Date: 9/17/2015 Start Qty: 2.00 *2*

Required Date: 9/17/2015 Req'd Qty: 2.00 *2*

Reference:

Accept

N900040100

Setup Start *NS1*

Stop *NS2*

Cust Item ID:

Customer:

Approvals: Process Plan: SH/LL Date: 015083 Tooling: Date: QC: Date: SPC (Y/N): Date:

Run Start *NR1*

Stop *NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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Draw Nbr	Revision Nbr
646.9600	N/C

110 Pick Kit 0.00

110

Packaging

Memo

0.00

Packaging

120

120

Small Fab

Small Fab

Memo

Assemble as per dwg and apply loctite 598 on all faying surfaces per note 2.

A/R RTV LOCTITE 598: M131311
exp. date: 11/16

0.00

0.01

130

130

QC

Quality Control

QC5- Inspect part completeness to step on W/O 0.00

Memo

0.00

2X

15/09/02 DAS 36 9-89

2X

15/09/02 DAS 36 6-89

3

DAS 38 9-89
SEP 02 2015

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS <table style="width: 100%; border: none;"> <tr> <td style="border: none;">Skid-tube ☐</td> <td style="border: none;">Cross tube ☐</td> <td style="border: none;">Water Jet ☐</td> <td style="border: none;">Engineering ☐</td> </tr> <tr> <td style="border: none;">Machining ☐</td> <td style="border: none;">Small Fab ☐</td> <td style="border: none;">Prod. Eng. Coord. ☐</td> <td style="border: none;">Quality ☐</td> </tr> <tr> <td style="border: none;">Thermoforming ☐</td> <td style="border: none;">Finishing ☐</td> <td style="border: none;">Rec/Store/Packaging ☐</td> <td style="border: none;">Other ☐</td> </tr> <tr> <td style="border: none;">Large Fab ☐</td> <td style="border: none;">Composite ☐</td> <td style="border: none;">Supplier ☐</td> <td></td> </tr> </table>						Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☐	Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐	Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐	Large Fab ☐	Composite ☐	Supplier ☐	
Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☐																						
Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐																						
Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐																						
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Date :		Step #:		QTY Effective :			MRB (QSI042) Approval																		
Description Work Order Deviation				Disposition			Completed By																		
							Lead hand / Supervisor Approval Verification																		
							QC / QA Coordinator Approval																		
Root Cause		FAULT CATEGORY																							
Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐	No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐	Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐	Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐	Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐	Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐	OTHER : ☐																			

Work Order ID 136105

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136105

Page 2

Item ID: 646.9603

Accept

N900040100Setup Start ***NS1***

Revision ID:

Stop ***NS2***

Item Name: Lower Cutter Assy Low

Start Date: 9/17/2015 Start Qty: 2.00

2

Cust Item ID:

Required Date: 9/17/2015 Req'd Qty: 2.00

2

Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____
QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Run Start ***NR1***Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
140	Identify as per dwg & Stock Location. <i>ok Q36</i>	0.00				2	27		
140							9-89		
Packaging	Memo	0.00							
Packaging	***IDENTIFY AS PER LAW MPP-120***								
									SEP 03 2015
150	QC21- Final Inspection - Work Order Release	0.00							
150									
QC	Memo	0.00							
Quality Control									

SH 20150903*15/9/3*

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date :	Step #:	QTY Effective :		MRB (QS1042) Approval	
Description Work Order Deviation		Disposition		Completed By	
				Lead hand / Supervisor Approval Verification	
				QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY			
Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐	No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐	Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐	Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐	Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐	Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐
OTHER :					

Picklist Print

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Page 1

Work Order ID: 136105

136105

Parent Item: 646.9603

646.9603

Parent Item Name: Lower Cutter Assy Low

Start Date: 9/17/2015

Required Date: 9/17/2015

Start Qty: 2.00

Required Qty: 2.00

Comments: IPP REV:A 12.08.13 NEW ISSUE DD VERF:JFS

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
646.9701 *646.9701* Cutter Sub Assembly		Manufactured	No			110	Each	6.0000	1	2		15/09/02	DAS 36 9-89
			<u>Location</u>		<u>Loc Qty</u>		<u>Loc Code</u>						
			MF		6								
					127683				2				
					127684								
646.9813 *646.9813* Lower Deflector Low		Manufactured	No			110	Each	5.0000	1	2		15/09/02	DAS 36 9-89
			<u>Location</u>		<u>Loc Qty</u>		<u>Loc Code</u>						
			MF		5								
					125263				2				
MS21042L08 *MS21042L 08* Nut		Purchased	No			110	Each	896.0000	3	6		15/09/02	DAS 36 9-89
			<u>Location</u>		<u>Loc Qty</u>		<u>Loc Code</u>						
			CA		101								
					m129682								
			ST260a		106								
					m131697				6				
			ST304		689								
					123900								
					m128401								
					m128429								
					m131317								
					m132930								

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date : _____	Step #: _____	QTY Effective : _____		MRB (QSI042) Approval	
Description Work Order Deviation		Disposition		Completed By	
/				Lead hand / Supervisor Approval Verification	
				QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY			
Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐	No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐	Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐	Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐	Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐	Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐
OTHER : _____					

Picklist Print

Friday, August 28, 2015 1:47:09 PM

Page 2

Work Order ID: 136105

136105

Parent Item: 646.9603

646 9603

Parent Item Name: Lower Cutter Assy Low

Start Date: 9/17/2015

Required Date: 9/17/2015

Start Qty: 2.00

Required Qty: 2.00

MS27039-08-19

Purchased

No

110

Each

552.0000

3

6

MS27039-08-19

Screw

DAS
36
9-89

15/09/02

Location

Loc Qty

Loc Code

ST273A

523

m131317

273

m132930

250

ST281

29

m131264

29

6

NAS1149FN832P

Purchased

No

110

Each

2,488.000

6

12

NAS1149FN832P

Washer

DAS
36
9-89

15/09/02

Location

Loc Qty

Loc Code

ST260a

1500

125268

1500

st268

988

125268

67

M130388

921

12

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QS1042) Approval Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval		
Description Work Order Deviation				Disposition					
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐							
		OTHER : ☐							

APICAL INDUSTRIES, INC.		ENGINEERING CHANGE NOTICE NO. 02743				SHEET 1 OF 1		
		DWG NO. 646.9600		REV: N/C	PREPARED BY S. HUFF	DATE: 01/07/10		EFFECT ON DWG ☐ INC. ☒ UNINC.
		DWG TITLE: CUTTER ASSY						
		APPROVED BY:	ENGR <i>P. Brans</i>	MFG <i>Samuel Gomez</i>	QC <i>Walter Lopez</i>	EFF: NEXT ORDER		
TRANSACTION CODES (TC): A-ADD C-CREATE R-REVISE D-DELETE		REASON: REVISED SCREW LENGTH.						
120150831 6A 136105								
3	R	601.3157	3	3	3	SCREW	MS27039-0818	
			.9603	.9602	.9601			
F/N	TC	PART NUMBER	QTY		DESCRIPTION		MATERIAL/SPECIFICATION	
DOCUMENTS EFFECTED:						CHANGE CATEGORY	DER REVIEW REQUIRED	
☐ MDL ☐ INSTALL INSTRUC ☒ ICA ☐ FMS ☒ BOM						☐ MAJOR ☒ MINOR	☐ YES ☒ NO	

Exploded view diagram of a three-deflector cutter sub-assembly. The diagram shows three deflector assemblies (646.9601, 646.9602, 646.9603) and three long deflector blades (6, 7, 8). Each deflector assembly consists of a base plate (1) with a central slot and a deflector blade (2) mounted on it. The blades are secured by screws (3) and washers (4). The deflector blades are labeled 6, 7, and 8. The deflector assemblies are labeled 646.9601, 646.9602, and 646.9603. The diagram includes a list of parts and their quantities: 3 PL (3), 6 PL (2), 3 PL (4). A table at the bottom right lists the parts and their quantities.

NOTES:

1			8	646.9613	LOWER DEFLECTOR LOW		
	1		7	646.9812	LOWER DEFLECTOR HIGH		
		1	6	646.9811	UPPER CUTTER DEFLECTOR		
A/R	A/R	A/R	5	601.2045	RTV, LOCTITE 598		
3	3	3	4	601.1541	LOCKNUT	MS21042008	
3	3	3	3	601.2765	SCREW	MS27037-0819	
6	6	6	2	601.2764	WASHER	MS1144FF0320	
1	1	1	1	646.9701	CUTTER SUB ASSY		

02743

1. IDENTIFY IAW MPP-120
2. APPLY F/N 5 AS REQUIRED TO ALL FAYING SURFACES OF F/N 1, 6, 7, & 8 UPON ASSEMBLY

I			B	646.9812	LOWER DEFLECTOR LOW		
	I		7	646.9812	LOWER DEFLECTOR HIGH		
		I	.6	646.9811	UPPER CUTTER DEFLECTOR		
A/R	A/R	A/R	5	601.2045	RTV, LOCITE 598		
3	3	3	4	601.1541	LOCKNUT	MSS2704Z008	
3	3	3	3	601.2765	SCREW	MSS27039-ZB-19	
6	6	6	2	601.2764	WASHER	JMS114PFHLSJF	
I	I	I	I	646.9701	CUTTER SUB ASSY		
X				646.9603	LOWER CUTTER ASSY LOW		
	X			646.9602	LOWER CUTTER ASSY HIGH		
		X		646.9601	UPPER CUTTER ASSY		
.9603	.9602	.9601	FIND #	PART #	DESCRIPTION	MAT'L	SPEC.
QTY				PARTS LIST			
NEXT ASSEMBLY 646.9500				APICAL INDUSTRIES 2508 TEMPLE HEIGHTS DR. OCEANSIDE, CA. 92056-3512 (760)724-S3C			
				CUTTER ASSY			
ORIGINAL DATE 05-07-09 DRAWN BY J DAKIN CHECKED B WARD 				REV CAGE CODE DWG NO. 646.9600 REV N/C		SCALE NONE SHEET 1 OF 2	
UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN INCHES TOLERANCES ARE: X .PLACES DECIMALS ±.01 3 PLACES DECIMALS ±.003 ANGLES ±.5°							